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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|---|-----------------|----------------------|------------------------|---------------------------|
| 09/974,630 | 10/10/2001 | Sang-Gil Shin | 5000-1-230 | 8488 |
| 33942 | 7590 10/08/2003 | | EXAMINER | |
| CHA & REITER | | | SANGHAVI, HEMANG | |
| 411 HACKENSACK AVE, 9TH FLOOR HACKENSACK, NJ 07601 | | | ART UNIT | PAPER NUMBER |
| | | | 2874 | |
| | | | DATE MAILED: 10/08/200 | DATE MAILED: 10/08/2003 · |

Please find below and/or attached an Office communication concerning this application or proceeding.

| 1. | | | | . / | | | |
|---|---|--|---|------------------------|--|--|--|
| · | | Application No. | Applicant(s) | NO | | | |
| | | 09/974,630 | SHIN ET AL. | • | | | |
| | Office Action Summary | Examiner | Art Unit | | | | |
| | | Hemang Sanghavi | 2874 | | | | |
| Period fo | The MAILING DATE of this communication app or Reply | pears on the cover sheet with the | c rresp ndence a | daress | | | |
| THE I - Exter after - If the - If NO - Failu - Any r | ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period or reply within the set or extended period for reply will, by statute eply received by the Office later than three months after the mailing ad patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be ti y within the statutory minimum of thirty (30) da will apply and will expire SIX (6) MONTHS fron , cause the application to become ABANDONI | mely filed ys will be considered time the mailing date of this of ED (35 U.S.C. § 133). | ily. communication. | | | |
| 1) | Responsive to communication(s) filed on | | | | | | |
| 2a)□ | This action is FINAL . 2b)⊠ Th | is action is non-final. | | | | | |
| 3)□ Dispositi | Since this application is in condition for allows closed in accordance with the practice under on of Claims | • | | ne merits is | | | |
| 4)⊠ | Claim(s) $1-10$ is/are pending in the application | 1. | | | | | |
| | 4a) Of the above claim(s) is/are withdra | wn from consideration. | | | | | |
| 5)□ | Claim(s) is/are allowed. | | , | | | | |
| 6)⊠ | Claim(s) <u>1-10</u> is/are rejected. | | | | | | |
| 7) | Claim(s) is/are objected to. | | | | | | |
| - | Claim(s) are subject to restriction and/o | r election requirement. | | | | | |
| | on Papers | | | | | | |
| • | The specification is objected to by the Examine | | | | | | |
| 10)[_] | The drawing(s) filed on is/are: a) ☐ acce | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. | | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. 12)☐ The oath or declaration is objected to by the Examiner. | | | | | | | |
| | inder 35 U.S.C. §§ 119 and 120 | armior. | | | | | |
| _ | Acknowledgment is made of a claim for foreign | n priority under 35 LLS C & 119/ | a) (d) or (f) | | | | |
| • | All b) Some * c) None of: | i priority under 55 0.5.5. § 115(| a)-(u) or (i). | | | | |
| ۵٫۱ | 1.⊠ Certified copies of the priority document | s have been received | | | | | |
| | 2. Certified copies of the priority document | | ion No | | | | |
| | 3. Copies of the certified copies of the prior | • • | | Stage | | | |
| * S | application from the International Buse the attached detailed Office action for a list | reau (PCT Rule 17.2(a)). | | Clage | | | |
| 14)∐ A | cknowledgment is made of a claim for domesti | c priority under 35 U.S.C. § 119(| (e) (to a provisiona | al application). | | | |
| |) The translation of the foreign language pro Acknowledgment is made of a claim for domest | * - | | | | | |
| Attachmen | t(s) | | | | | | |
| 2) D Notic | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5</u> | 5) Notice of Informal | y (PTO-413) Paper No Patent Application (P | | | | |

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DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Hironobu et al (JP 04-204523).

Hirnobu et al discloses an optical waveguide device comprising a planar lightwave circuit (2); a heating line (3) attached to the lower surface of the PLC; and external power source coupled to the heating line for generating heat thereto.

Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Booth (US 5,016,958).

Booth discloses an optical switch comprising a planar lightwave circuit (PLC), a heating line (58E, 58B) attached to the lower surface of the PLC, and an external power source coupled to the heating line for generating heat thereto. The insulating layer (78) is also attached to the lower surface of the PLC. The heating line is a thin film attached to the lower surface of the PLC via a screen-printing process (silk printing process). See Figs. 4A-4D and lines 23-68 of column 9 through lines 1-26 of column 10.

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ueda, Schiaffino et al, Jouanno et al, Beguin et al, Takasugi et al, and Tokunaga et al disclose different types of a planar circuit waveguides including a heating element.

The prior art submitted by applicant has been considered. See attached copy of form PTO-1449.

Since the Booth and Hironobu et al references used in the above rejections were submitted by applicant in the prior art statement, no copies thereof are provided with this Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hemang Sanghavi whose telephone number is 703-305-3484. The examiner can normally be reached on Monday-Thursday (8:30 AM-6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on 703-308-4819. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Hemang Sanghavi

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Primary Examiner Art Unit 2874

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